

**REMARKS**

Favorable reconsideration, reexamination, and allowance of the present patent application are respectfully requested in view of the foregoing amendments and the following remarks.

**Summary of Office Action**

In the September 5, 2006 Office Action:

Claims 3, 10, 12, 16 and 21 were rejected under 35 U.S.C. § 112, second paragraph;

Claims 1-3 and 26-30 were rejected under 35 U.S.C. § 102(e) over U.S. Patent No. 7,048,412 to Martin (Martin '412);

Claims 4, 8-10 and 20-22 were rejected under 35 U.S.C. § 103(a) over Martin'412;

Claims 5 and 23 were rejected under 35 U.S.C. § 103(a) over Martin in view of WO 2052190 (Chen '190);

Claims 7, 15, 16, 17 and 25 were rejected under 35 U.S.C. § 103(a) over Martin in view of U.S. Patent No. 4,654,629 (Bezos '629);

Claim 18 was rejected under 35 U.S.C. § 103(a) over Martin in view of Chen '190 and Bezos '629;

Claims 6, 11-13 and 24 were rejected under 35 U.S.C. § 103(a) over Martin in view of U.S. Patent No. 5,890,794 (Abtahi '794);

Claim 14 was rejected under 35 U.S.C. § 103(a) over Martin in view of Chen '190 and Abtahi '794;

Claim 19 was rejected under 35 U.S.C. § 103(a) over Martin in view of Abtahi '794 and Bezos '629; and

the rejections and objections to the claims set forth in the previous Office Action were withdrawn.

**Summary of Response to Office Action**

By this Amendment, claims 1, 2, 3, 5, 6, 26, and 28 are amended. The claims currently pending in this application are claims 1-30. Claims 1, 5, 6, 26 and 28 are the only independent claims.

**All Claims Satisfy the Requirements of 35 U.S.C. § 112, second paragraph**

Claim 3 has been amended to recite that the second LED array is arranged in a row direction such that a projected image of a light distribution pattern formed by light reflected from a corresponding one of said reflective surfaces has a longitudinal axis in a direction substantially perpendicular to the optical axis. Thus, claim 3 does not include reference to a “horizontal line,” as currently objected to by the Examiner. Accordingly, it is respectfully submitted that Claim 3 satisfies all requirements under 35 U.S.C. § 112. Withdrawal of the rejection of claims 3, 10, 12, 16 and 21 under 35 U.S.C. § 112, second paragraph is respectfully requested.

**All Claims Define Allowable Subject Matter**

**35 U.S.C. 102(e)**

In the Office Action, beginning at page 2, paragraph 5, claims 1-3 and 26-30 are rejected under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 7,048,412 to Martin (Martin ‘412). This rejection is respectfully traversed for the following reasons.

In the present application, claim 1 recites a combination of elements including in part: a light source holder shaped in a substantially polygonal form having sides and a longitudinal axis in a direction that is substantially parallel with an optical axis of said lamp, wherein a first side includes at least a first LED array with the LED chips arranged in a row that extends substantially parallel to the optical axis and a second side includes at least a second LED array with the LED chips arranged in a row that extends substantially perpendicular to the optical axis.

At least this feature is neither taught nor suggested by Martin ‘412. By contrast, Martin ‘412 discloses an axial LED source lamp having LED light sources that are placed about the

lamp axis in a parallel/axial arrangement. The lamp axis according to Martin '412 is along the direction of light emission.

Nowhere in the Martin'412 patent is there disclosed a light source holder having sides and a longitudinal axis in a direction that is substantially parallel with an optical axis of said lamp, wherein a first side includes at least a first LED array with the LED chips arranged in a row that extends substantially parallel to the optical axis and a second side includes at least a second LED array with the LED chips arranged in a row that extends substantially perpendicular to the optical axis, as recited in claim 1.

With regards to independent claim 26, Martin '412 fails to disclose or teach at least the feature of a light source including at least three LED arrays, each LED array including a row of LED chips formed thereon, wherein at least one row of LED chips extends substantially perpendicular to an optical axis of the LED type lamp.

With regards to independent claim 28, Martin '412 fails to disclose or teach at least the feature of a lamp including at least one row of LED chips arranged substantially perpendicular to the optical axis.

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." M.P.E.P. § 2131 (citing *Verdegaal Bros. v. Union Oil Co. Of California*, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987)). Accordingly, it is respectfully submitted that the Martin '412 patent fails to meet the criteria for anticipating independent claims 1, 26, and 28 because the Martin '412 patent fails to disclose or teach at least those claimed features as recited above.

Further, since claims 2 and 3 depend from and therefore incorporate all the features of claim 1, claims 2 and 3 are also not anticipated by the Martin '412 patent at least for the above reasons for which claim 1 is not anticipated, and for the separate features that claims 2 and 3 recite.

Since claim 27 depends from and therefore incorporates all the features of claim 26, claim 27 is also not anticipated by the Martin '412 patent at least for the above reasons for which claim 26 is not anticipated, and for the separate features that claim 27 recites.

Since claims 29 and 30 depend from and therefore incorporate all the features of claim 28, claims 29 and 30 are also not anticipated by the Martin '412 patent at least for the above reasons for which claim 28 is not anticipated, and for the separate features that claims 29 and 30 recite.

Thus, Applicant respectfully requests that the rejection of all claims 1-3 and 26-30 under 35 U.S.C. § 102(e) be withdrawn.

**35 U.S.C. § 103(a)**

In the Office Action, beginning at page 5, paragraph 8, Claims 4, 8-10 and 20-22 are rejected under 35 U.S.C. § 103(a) as obvious over the disclosure of the Martin '412 patent. As claims 4, 8-10 and 20-22 depend from and therefore include all the features of claim 1, Martin '412 also fails to disclose or teach the features of claims 4, 8-10 and 20-22 for at least the same reasons as given above for claim 1. Applicant respectfully requests that the rejection of claims 4, 8-10 and 20-22 under 35 U.S.C. § 103(a) in view of Martin '412 be withdrawn.

Claims 5 and 23 are rejected under 35 U.S.C. § 103(a) over Martin '412 in view of WO 2052190 to Chen (Chen '190). This rejection is respectfully traversed, and Applicant requests reconsideration for at least the following reasons.

Chen'190 teaches the use of a shade in which "the LED core column is installed on the shade" (please see the English Abstract of Chen'190). There simply is no teaching of a shade located in a lateral direction from the light source holder and in a direction substantially perpendicular to the longitudinal axis of the light source holder, the shade being located between at least one of the plurality of light sources and at least one of the plurality of corresponding reflective surfaces, as recited in claim 5.

The Office bears the initial burden of establishing a *prima facie* case of obviousness. M.P.E.P. § 2142. If the Office fails to set forth a *prima facie* case of obviousness, Applicant is under "no obligation to submit evidence of nonobviousness," such as unexpected results or commercial success. *Id.* In other words, if the Office fails to meet the initial burden of establishing a *prima facie* case of obviousness as to a given claim, then that claim is not obvious

without any evidence of nonobviousness by Applicant.

In order to establish a *prima facie* case of obviousness, the Office must satisfy three requirements. M.P.E.P. § 2142. First, "the prior art reference, or references when combined, must teach or suggest *all* the claim limitations." *Id.* (emphasis added). Second, the Office must show that there is "some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings." *Id.* Finally, "there must be a reasonable expectation of success." *Id.*

In the present case, neither Martin'412 nor Chen'190 teaches or suggests a shade located in a lateral direction from the light source holder and in a direction substantially perpendicular to the longitudinal axis of the light source holder, the shade being located between at least one of the plurality of light sources and at least one of the plurality of corresponding reflective surfaces, as recited in claim 5. Thus, the Office Action fails to establish a *prima facie* case of obviousness as to claim 5.

Further, the Office Action attempts to provide motivation for modifying Martin'412 in view of Chen'190 by stating that "it would have been obvious to one of skill in the art...to use the configuration of Chen in the apparatus of Martin et al. to make the output light brighter." However, the shade of Chen'190 is not used to cause greater brightness. By contrast, the Abstract of Chen'190 indicates that light from the LEDs is "directed to the same direction, so that....brightness is stronger." It is respectfully submitted that a reading of this limited disclosure in Chen'190 would not have motivated one of skill in the art to modify the Martin'412 patent as suggested in the outstanding Office Action. The only reason to combine the references is derived from the use of Applicant's own specification as a roadmap for combining the references, which is the exact definition of the use of *impermissible* hindsight.

Claim 23 is dependent from claim 5, and therefore includes all the features of claim 5. Accordingly, neither Chen '190 nor Martin '412, either alone or in combination, disclose or teach at least the above-noted features of claims 5 and 23. The Office Action fails to meet the requirements for establishing a *prima facie* case of obviousness. Therefore, Applicant

respectfully requests that the rejection of claims 5 and 23 under 35 U.S.C. § 103(a) be withdrawn.

Claims 7, 15, 16, 17 and 25 are rejected under 35 U.S.C. §103(a) over Martin '412 in view of U.S. Patent No. 4,654,629 to Bezos (Bezoz '629). This rejection is respectfully traversed, and Applicant requests reconsideration for at least the following reasons.

The Bezoz '629 patent fails to make up for the above-noted deficiencies with respect to the base reference of Martin '412. In particular, Bezoz '629, either alone or in combination with Martin '412, fails to disclose or teach at least the feature of a light source holder having sides and a longitudinal axis in a direction that is substantially parallel with an optical axis of said lamp, wherein a first side includes at least a first LED array with the LED chips arranged in a row that extends substantially parallel to the optical axis and a second side includes at least a second LED array with the LED chips arranged in a row that extends substantially perpendicular to the optical axis, as recited in claim 1 of the present application. By contrast, Bezoz '629 discloses an LED array arranged to face the lens of a marker light.

Claims 7, 15, 16, 17 and 25 are dependent from claim 1, and therefore include all the features of claim 1. Neither Bezoz '629 nor Martin '412, either alone or in combination, disclose or teach at least the above-noted features of claims 1, 7, 15, 16, 17 and 25. Thus, Applicant respectfully requests that the rejection of claims 7, 15, 16, 17 and 25 under 35 U.S.C. § 103(a) be withdrawn.

Claim 18 is rejected under 35 U.S.C. §103(a) over Martin '412 in view of Chen '190 and further in view of Bezoz '629. This rejection is respectfully traversed, and Applicant requests reconsideration for at least the following reasons.

The Chen '190 publication and Bezoz '629 patent in combination still fail to make up for the deficiency in the base reference of Martin '412. Moreover, Chen '190 and Bezoz '629, either alone or in combination with Martin '412, fail to disclose or teach at least the feature of a shade located in a lateral direction from the light source holder and in a direction substantially perpendicular to the longitudinal axis of the light source holder, the shade being located between at least one of the plurality of light sources and at least one of the plurality of corresponding

reflective surfaces, as recited in claim 5 and therefore recited in dependant claim 18. Thus, Applicant respectfully requests that the rejection of claim 18 under 35 U.S.C. § 103(a) be withdrawn.

Claims 6, 11-13 and 24 are rejected under 35 U.S.C. §103(a) over Martin '412 in view of U.S. Patent No. 5,890,794 to Abtahi (Abtahi '794). This rejection is respectfully traversed, and Applicant requests reconsideration for at least the following reasons.

With respect to claim 6 and 24, neither Martin '412 nor Abtahi '794, either alone or in combination, disclose or teach a vehicle lamp that includes at least one LED array that includes a cylindrical lens having a longitudinal axis that substantially coincides with a row axis of the LED array, as recited in claim 6. By contrast, the Abtahi '794 patent discloses lighting units formed as a beacon light in which a plurality of LEDs are located within a cover, as shown in Fig. 5 of the Abtahi '794 patent. Nowhere does the Abtahi '794 patent disclose or teach a lens, let alone a lens having the above-noted characteristics recited in claim 6, or claim 24 which is dependent from claim 6.

With respect to claims 11-13, the Abtahi '794 patent also fails to make up for the above-noted deficiencies with respect to the base reference of Martin '412. In particular, Abtahi '794, either alone or in combination with Martin '412, fails to disclose or teach at least the feature of a light source holder having sides and a longitudinal axis in a direction that is substantially parallel with an optical axis of said lamp, wherein a first side includes at least a first LED array with the LED chips arranged in a row that extends substantially parallel to the optical axis and a second side includes at least a second LED array with the LED chips arranged in a row that extends substantially perpendicular to the optical axis, as recited in Applicant's claim 1.

Claims 11-13 are dependent from claim 1, and therefore include all the features of claim 1. Neither Abtahi '794 nor Martin '412, either alone or in combination, disclose or teach at least the above-noted features of claims 11-13 nor the separate lens features that they recite.

For all of the above reasons, Applicant respectfully requests that the rejection of claims 6, 11-13 and 24 under 35 U.S.C. § 103(a) be withdrawn.

Claim 14 is rejected under 35 U.S.C. §103(a) over Martin '412 in view of Chen '190 and

further in view of Abtahi '794. This rejection is respectfully traversed, and Applicant requests reconsideration for at least the following reasons.

The Chen '190 publication and Abtahi '794 patent in combination still fail to make up for the deficiency in the base reference of Martin '412. Moreover, Chen '190 and Abtahi '794, either alone or in combination with Martin '412, fail to disclose or teach at least the feature of a shade located in a lateral direction from the light source holder and in a direction substantially perpendicular to the longitudinal axis of the light source holder, the shade being located between at least one of the plurality of light sources and at least one of the plurality of corresponding reflective surfaces, as recited in claim 5 and therefore as recited in dependant claim 14. Thus, respectfully requests that the rejection of claim 14 under 35 U.S.C. § 103(a) be withdrawn.

Claim 19 is rejected under 35 U.S.C. §103(a) over Martin '412 in view of Bezos '629 and further in view of Abtahi '794. This rejection is respectfully traversed, and Applicant requests reconsideration for at least the following reasons.

The Bezos '629 and Abtahi '794 patents in combination still fail to make up for the deficiency in the base reference of Martin '412. Moreover, Bezos '629 and Abtahi '794, either alone or in combination with Martin '412, fail to disclose or teach at least the feature of at least one of said LED arrays including a cylindrical lens having a longitudinal axis that substantially coincides with the row axis of the at least one of the LED arrays, as recited in claim 6 and therefore as recited in dependant claim 19. Thus, Applicant respectfully requests that the rejection of claim 19 under 35 U.S.C. § 103(a) be withdrawn.



**Conclusion**

Applicant respectfully submits that the present patent application is in condition for allowance in its entirety. An early indication of the allowability of this patent application is therefore respectfully solicited.

If the Patent Examiner believes that a telephone conference with the undersigned would expedite passage of this patent application to issue, they are invited to call on the number below.

It is not believed that extensions of time are required, beyond those that may otherwise be provided for in accompanying documents. If, however, additional extensions of time are necessary to prevent abandonment of this application, then such extensions of time are hereby petitioned under 37 C.F.R. § 1.136(a), and the Commissioner is hereby authorized to charge fees necessitated by this paper, and to credit all refunds and overpayments, to our Deposit Account listed on the application transmittal filed with this application.

Respectfully submitted,  
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